

each of said first and second capacitors having a second terminal connected to said input signal, the one of said first and second switches controlled by predetermined voltage representing a predetermined binary state of said bistable circuit element connecting said transitions in said input signal to said bistable circuit element.

5           2.       The toggle flip-flop circuit of claim 1 wherein said bistable circuit element comprises first and second inverters, each inverter having an input terminal and an output terminal, output terminals of each inverter being connected to the input terminal of the other inverter, output terminals of each of said inverters corresponding to respective ones of said output terminals of said bistable circuit element.

10           3.       The toggle flip-flop circuit of claim 2 wherein said triggering means further comprises means for connecting the output terminal of the one of said inverters having said predetermined output voltage to said reference voltage, thereby causing said input terminal of the one of said inverters not having said predetermined output voltage to switch binary states.

15           4.       The toggle flip-flop circuit of claim 3 wherein said means for connecting comprises a switch receiving a pulse signal corresponding to said input signal transitions of said predetermined polarity.

              5.       The toggle flip-flop circuit of claim 4 further comprising means for inhibiting transitions in said input signal of other than said predetermined polarity from  
20 affecting said means for connecting.

              6.       The toggle flip-flop circuit of claim 6, wherein said means for inhibiting comprises a transistor operating in response to a constant applied voltage to provide a connection to said reference voltage.

              7.       The toggle flip-flop circuit of claim 6 wherein said reference voltage is  
25 ground.

              8.       The toggle flip-flop circuit of claim 1 further comprising means for resetting said bistable circuit element to an initial state.

              9.       A toggle flip-flop circuit comprising  
                  a bistable circuit element having first and second output terminals exhibiting  
30 respective complementary first and second binary output voltages, and

triggering means for selectively coupling transitions of a predetermined polarity in a binary input signal to said bistable circuit element to initiate a change of state for said bistable circuit from a present output state to a complementary output state, said change of state causing both said first and second terminals to change binary output voltages,

5        said triggering means comprising

         a first capacitor having a first terminal connected to a reference voltage and a second terminal connected through a first switch to said first output of said bistable circuit element,

         a second capacitor having a first terminal connected to a reference voltage and a second terminal connected through a second switch to said second output of said bistable circuit element,

         said first and second switches controlled by said binary input signal such that

             when said binary input signal is in a first state said switches connect said first terminal of respective ones of said capacitors to respective outputs of said bistable circuit element,

             when said binary input signal is in a second state said switches disconnect said capacitors from said respective outputs of said bistable circuit element,

             means responsive to said voltage on said capacitors and said transitions of said predetermined polarity in said binary input signal for switching the binary state of said bistable circuit element.

10.     The toggle flip-flop circuit of claim 1 wherein said bistable circuit element comprises first and second inverters, each inverter having an input terminal and an output terminal, output terminals of each inverter being connected to the input terminal of the other inverter, output terminals of each of said inverters corresponding to respective ones of said output terminals of said bistable circuit element.

11.     The toggle flip-flop circuit of claim 2 wherein said means for switching the binary state of said bistable circuit element comprises means for connecting the output terminal of one of said inverters to said reference voltage.

12.     The toggle flip-flop circuit of claim 11 wherein said switches comprise pass transistor configurations responsive to said input signal and its complement.

13. The toggle flip-flop circuit of claim 4 further comprising means for inhibiting transitions in said input signal of other than said predetermined polarity from affecting said means for connecting.

14. The toggle flip-flop circuit of claim 13, wherein said means for inhibiting  
5 comprises a transistor connected in parallel across said capacitors operating in response to a constant applied voltage.

15. The toggle flip-flop circuit of claim 9 wherein said reference voltage is ground.

16. The toggle flip-flop circuit of claim 9 further comprising means for  
10 resetting said bistable circuit element to an initial state.

17. The toggle flip-flop circuit of claim 16 wherein said means for resetting comprises a switch selectively connecting at least one of said output terminals to respective reference voltages.

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